

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/02

Date Received: 10/31/02

Project: Metro Self Monitor, PO# M89446

Date Extracted: 11/04/02

Date Analyzed: 11/04/02

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M89446 210273-01	0.30	0.26	0.22	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 210143-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.51	0.53	4	0-20
Copper	mg/L (ppm)	0.60	0.61	2	0-20
Nickel	mg/L (ppm)	0.55	0.56	2	0-20
Zinc	mg/L (ppm)	0.06	0.11	a	0-20

Laboratory Code: 210143-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.51	89	80-120
Copper	mg/L (ppm)	2	0.60	90	80-120
Nickel	mg/L (ppm)	4	0.55	89	80-120
Zinc	mg/L (ppm)	2	0.06	91	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	95	96	80-120	1
Copper	mg/L (ppm)	2	92	94	80-120	2
Nickel	mg/L (ppm)	4	94	96	80-120	2
Zinc	mg/L (ppm)	2	94	94	80-120	0

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

November 6, 2002

DUPLICATE COPY

INVOICE #02ACU1106-1

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M89446 - Results of testing requested by
Gerry Thompson for material submitted on October 31, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc
by Method 6010B @ \$80 per sample

\$ 80.00

Amount Due

\$ 80.00

FEDERAL TAX ID # (b) (6)

210273

SAMPLE CHAIN OF CUSTODY

ME 10/31/02 AI₄

Send Report To

Company

Address

City, State, ZIP

Phone #

Fax #

SAMPLERS *(signature)*

PROJECT NAME/NO.

PO #

REMARKS

Page # _____ of _____

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS					
M89446	01	10/31/02	12:30	H2O	1							✓				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

COMPANY

DATE

TIME

*G. Thompson**Laura Hoyer*

Acw

FBI

10/31/02

↓

1:08pm

↓

FRIEDMAN & BRUYA, INC.

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November 6, 2002

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

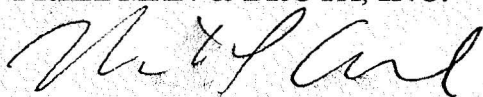
Dear Mr. Thompson:

Included are the results from the testing of material submitted on October 31, 2002 from your Metro Self Monitor, PO# M89446 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ACU1106R.DOC